

Multnomah County Willamette River Bridges Capital Improvement Plan



Project Summary Information: Scour Remediation

Bridge Names(s):	Broadway, Burnside, Hawthorne and Morrison	Project ID#:	BUN-MU-02	Project Status:	In Progress		
Project Rank:	26	Primary Category of Work	Structural	Performance Attribute Total Score	18	Importance Score	TI-2 14.68
Logical Grouping Project ID #'s:	BR-STRUCT-05, BU-STRUCT-07, HA-STRUCT-07 and MO-STRUCT-21						
Bridge Num and Names(s):	06757 Willamette River, Broadway St [Broadway] ; 06757 Willamette River, Broadway St [Broadway] ; 00511 Willamette River, Burnside St (Burnside) [Burnside]; 00511 Willamette River, Burnside St (Burnside) [Burnside]						

Definition of Problem

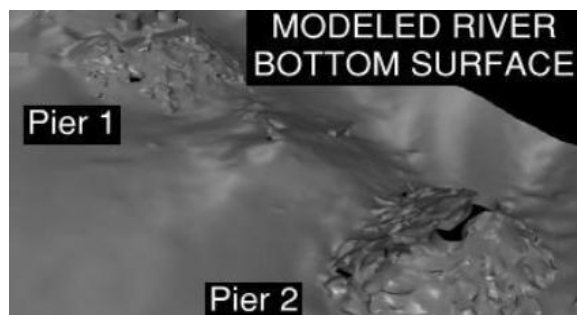
Portions of the in-water piers of the Broadway, Burnside, Hawthorne and Morrison Bridge Main River Spans were all identified as having some degree of scour vulnerability. These vulnerabilities were determined from an underwater hydrologic survey conducted in 2014. These deficiencies generally consist of incomplete or insufficient protection against scour due to a lack of revetment. In addition, evidence of limited undermining and concrete degradation of the Burnside Bridge pier substructure below the waterline was observed.

Description of Proposed Solution

The proposed solution to the defined problem includes the placement of additional rock armor for the Broadway, Burnside and Morrison Bridges at select in-water piers. Monitoring of the existing rock armor and the installation of additional rock armoring of the east riverbank of the Hawthorne Bridge is also included in the project. The observed concrete degradation at the Burnside Bridge will be repaired as part of this project.

Project Justification

The benefit of completing the installation of additional scour protection measures is to reduce the risk of scour undermining of the in-water pier foundations and riverbank sections. The benefit of completing the concrete degradation repairs for the Burnside Bridge would be to restore the full cross-section of the in-water pier substructure and prevent further deterioration.



Right-of-Way:	\$0
Utility Reimbursement:	\$0
Construction:	\$15,224,572
Preliminary Engineering:	\$3,539,061
Construction Engineering:	\$3,539,061
Total Cost at Target Construction Time:	\$22,302,695
Target Construction Time:	2020-2024

Notes:

None entered.